THERAPEUTICS OF THE NERVOUS SYSTEM.

A Case of Epilepsy, with Peripheral Aura, Cured by Blistering at the Seat of Aura. DIGNAT (*Progres méd.*, 1886, No. 18) after reviewing the literature of the subject, reports a case of this kind.

A shoemaker, twenty-one years old, had an epileptic attack, for the first time, Jan. 1, 1880. The attack began with a sensory and motor aura in the thumb of the left hand. He lost consciousness, the head was turned to the left, the eyes to the right; general convulsions and sleep followed. During the following seventeen months he had twenty-one such attacks in the daytime, and a very large number of lighter ones by night. In the intervals, with the exception of a decided increase of the knee jerks, there was no disturbance of sensation or motion, only in the bend of the left elbow there was a painful point in the course of the median nerve. He was admitted, in the summer of 1882, to the Pitres Hospital, at Bordeaux. A large blister was twice applied (July 8th and 15th) at the above tender spot. No other treatment was employed. From this time till 1884, the last time he was seen, he was entirely free from attacks.—*Neurol. Central.*, No. 12, 1886.

The Influence of Treatment on Chorea, with Special Relation to the Full Use of Arsenic and its Results.—Dr. W. B. CHEADLE combats the opinion that chorea is better influenced by treatment, and argues that chorea must be favorably influenced by treatment, inasmuch as there is a certain number of cases which tend to run on indefinitely when *not* brought under treatment, but that they do not so run on, or for an extended period, when they *are* brought under sytematic treatment. If treatment does not influence the course and duration of chorea, *some* of the cases, which come under treatment in the early stages, would run on indefinitely, and continue for months and months, just as untreated cases do. But C. claims they do not. Analyzing 167 cases, which have come under his own observation, he finds that some have run on 13, 14, 15, 17, 20, 34, 38, 47, 52 weeks, and longer, before coming under treatment, while the longest duration after coming under treatment was 12 weeks and 1 day, and that in a single instance; and yet a large number came under treatment at a very early stage. The following statistics are given as proof of the value of arsenic, which he thinks is the only drug capable of shortening the duration of the disease, as well as mitigating the symptoms.

Of 62 cases treated otherwise than by arsenic, the average time under treatment in hospital was 36.01 days; while of 105 cases, treated with arsenic, the average time of patients in hospital is 26.6 days. The average duration of the disease, in both classes of cases, before admission, was 63 days.

[One fallacy in such statistics seems, to the Reporter, to be in taking the period of stay in the hospital as a measure of duration

of disease, especially when the cases compared occurred in different years, as was the case with those reported. In some hospitals, at least, there has been a tendency of late years to discharge patients at the earliest possible moment, and not allow them to prolong their stay unnecessarily, as was formerly frequently the case. Furthermore, it is not easy always to say exactly when a chronic patient is cured, and one is not apt to be as exact in recording the precise time of cure in cases treated at an earlier period, and by methods in which one has little interest, as in cases treated by a method in which one is interested.]

The Physiological and Therapeutic Effects of Adonidin. Dr. H. A. HARE. *Therapeutic Gaz.*, April 15, 1886.

The adonis vernalis has for many years been used empirically in Russia for all forms of cardiac failure ; but until the clinical observations of Bubnow, of St. Petersburg, were made in 1879, nothing was known of the action of this drug. Since then a number of observers have clinically studied it and given favorable reports of its action as a cardiac stimulant.

The writer, has supplemented these, for the most part, clinical observations by an elaborate study of its physiological action on animals, using for the purpose frogs and dogs.

The conclusions he arrives at are : Adonidin in all doses increases arterial pressure by stimulating the vaso-motor centres, and by increasing the cardiac force.

In moderate doses it increases the pulse rate and force from the first, but when large toxic doses are given, it primarily slows the heart by stimulating the pneumogastric, and then increases the pulse rate by depressing the inhibitory nerves and stimulating the accelerator apparatus.

The slowing of pulse rate is also, in all probability, due in part to increased arterial pressure ; as under these circumstances the blood paths are greatly diminished in calibre. On the nervous system the drug has but little action, unless the quantity administered be enormous. Under these conditions it paralyzes the sensory side of the cord, but has no effect on the motor tract, or on the efferent or afferent nerve-trunks.

As to the practical use of the drug, Durand and others all declare that adonidin is possessed of far greater diuretic properties than is digitalis. Thus Traversa says that it increases the urine from 300 c. c. (the total quantity passed) to 2,000 c. c., the sp. gr. being diminished ; œdema is rapidly diminished under its influence. While Durand does not believe that its cardiac effects are equal to those of digitalis, he concludes that it is preferable when a long course of medication is necessary, as it is not cumulative.

The indications for its use are the same as for digitalis.

Houchard's observations agree with those of Durand and others, viz., that adonidin diminishes the frequency and increases the force of the heart's action, arterial tension, and diuresis.

The dose is one fifteenth of a grain in pill form four or five times daily. MORTON PRINCE.

A Few Words About Hypnotism from a Therapeutic Point of View. Dr. FOURNIER. *Gazette des Hôpitaux*, p. 536, 1866.

The author in this article, in opposition to the views of Charcot, Bernheimer, Richet, Dumontpallier, and Battey, sanctioning the therapeutic use of hypnotism, takes a directly opposite stand, and publishes two cases in which direct injury was done by its use. The first case was that of a man, æt. thirty-six, who has suffered from occasional epileptoid attacks for the past seven years. Since the last year these have given place to well-marked epileptic attacks, which took place about every twenty-eight days, so that in all he had had fourteen attacks during the year. The first hypnotic séance took place on the 11th of May. By means of fixation of a bright object, closure of the lids was obtained after half an hour. All the experiments dependent upon nervo-muscular hyperexcitability were performed with success. After awakening he complained of heaviness of the head, which, however, soon left him.

May 13th.—Severe epileptic attack. Hypnotism.

May 14th.—No attack. Hypnotism.

May 15th.—No attack. Hypnotism.

May 17th.—Two epileptoid attacks since last visit. Hypnotism.

May 18th.—No attack. Hypnotism.

May 20th.—Yesterday, at 4 P.M., had an epileptic attack of the utmost severity.

May 22d and 24th.—Hypnotism.

May 25th.—At 8 P.M., exceedingly severe attack of epilepsy.

Hypnotism discontinued.

The second case:

Mrs. C., æt. thirty-four, has since two years, attacks of hysteria, which come on at time of menstruation. All remedies having proven futile, hypnotism was tried.

May 30th, at 2.30 P.M., first séance. A few minutes sufficed to produce sleep. Various experiments. Awakening after a few minutes.

The night from the 30th to the 31st, she had a most severe attack. This attack differed from the preceding ones. It began by intense hallucinations, and finished by severe attacks of dyspnœa and palpitation of the heart.

These cases not only lead the author to cautious experiments in the use of hypnotism upon patients, but also upon people who are perfectly healthy. The number of hysterical, hypochondriacal, and neuropathic individuals is already large enough without increasing the number through any fault of our own.

G. W. J.

The Electrical Resistance of the Body.—DE WATTEVILLE (*Neurol. Central.*, No. 9, 1886) states that for a long time he has noticed a marked variation between the deviation of the needle of an absolute galvanometer and the number of the elements

employed. He at first sought for an explanation of this phenomenon in the inaccuracy of the instrument. After obtaining, however, an Edelmann's galvanometer, he convinced himself that the cause of the difference lay in variations of the resistance of the body. Waller and Stone arrived independently at the same conclusions.

A simple method of observing the fact is the following : Place two large electrodes upon the skin, and after its resistance has been reduced to a minimum, observe the deviation of the needle after each group of a given and equal number of elements. Then add to the first group, the second, third, and fourth successively, and mark the deviation after each addition ; it will be found that the total deviation after each addition is greater than the sum of each group taken separately. For example : de W. found that each of four groups, containing three Leclanchés each, gave a current strength of two milliampères. After joining successively the groups, he obtained with 3, 6, 8, 12 elements, not 2, 4, 6, 8 M.-A. respecting as he should by Ohm's law, but instead an increase from 2 to 5, 8.5 and 11.8 M.-A. A control experiment with a metal resistance coil gave an increase in arithmetical progression according to Ohm's law, showing that the above variation was due to a variation in the resistance of the human body. De Watteville concludes that we can lay it down as a law that in the usual medical uses of electricity the resistance of the human body diminishes with the increase of the electro-motive force.

Again, it is well known that when a current, passing through the body, is suddenly reversed, there is an increase in its strength shown by the galvanometer. For example : a current of twenty milliampères, on being reversed, will more or less quickly increase to 23, 24, and 25 M.-A. After some moments the needle of the galvanometer will be seen to return to the original number 20. The amount of increase of deviation and rapidity of return to the original strength will depend upon the duration of the current before being reversed. By a control experiment it is shown that a reverse current due to polarization does not correspond to the above amount of increase, but only amounts to a fraction of a milliampère. De Watteville concludes that the electrical current as usually applied for medical purposes causes certain alterations in the tissues, which in turn give rise to a temporary increase in the strength of the current on being reversed. This increase may be explained in two ways : Either the resistance of the tissues for the reversed current is diminished, or there is developed an electro-motive force through polarization. The second hypothesis is the more acceptable. Nevertheless there are opposed to it the facts that, first, the supplementary deviation of the needle does not appear immediately with the change in the direction of the current ; and, second, as the above control experiment shows, the tissues do not give a current as the result of polarization sufficient to account for the increase.

MORTON PRINCE.